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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/565,436 | 01/20/2006 | Pal Skogerbo | MNL-2810-43 | 8092 |

23117 7590 09/03/2009
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| EXAMINER |
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BEACH, THOMAS A

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| ART UNIT | PAPER NUMBER |
|----------|--------------|

3671

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| MAIL DATE | DELIVERY MODE |
|-----------|---------------|

09/03/2009

PAPER

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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/565,436
Filing Date: January 20, 2006
Appellant(s): SKOGERBO, PAL

Michelle N. Lester
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 05/22/09 appealing from the Office action mailed 11/17/08.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

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(6) Grounds of Rejection to be Reviewed on Appeal

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

| | | |
|-----------|---------|---------|
| 7,034,669 | Lamb | 04-2006 |
| 4,621,974 | Krueger | 11-1986 |

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2, 4-8, and 10-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Lamb 7,034,669. Lamb shows a system/method for controlling the movements of objects in an automated or remote operated system comprising independent transporting means 5 for moving a number of objects 7 relative to each other, the system being providing with means for controlling the position and velocity of the objects relative to each other, wherein each object is related to a defined geometric shape 13/15 (shown in figures 3-5) related to the object positions having dimensions corresponding to or exceeding the physical dimensions of the object in all directions, corresponding to or exceeding the physical dimensions of the respective object in all directions, each transporting means 5 is related to a stop distance (column 4, lines 60+ & column 5, lines 1-4) needed for the respective transporting means to come to a complete stop, and a critical allowed distance is defined between the defined geometric shapes, whereby collisions between objects can be avoided by changing at least one of a speed or direction of movement of at least one of the transporting means when a distance between defined geometric shapes moving on a common axis corresponds to the critical allowed distance (defined by the safe operation distance between geometric shapes 13/15 where operation is not interrupted) where Lamb shows that this critical distance (defined by Zones 1-3; figures 1, 3, 5) is dependent on the relative movement between the objects (column 4, lines 60+; column 5, lines 1-4).

As concerns claim 2, Lamb shows the dimensions of the geometric shape 13/15 corresponds to the size of the object (figure 5).

As concerns claim 4, Lamb shows the critical distance between two geometric shapes moving toward each other corresponds to the braking distance for each corresponding object plus a chosen additional distance (column 4, lines 60+ & column 5, lines 1-4; figures 1, 3, 5).

As concerns claim 5, Lamb shows the objects and corresponding geometric shapes are adapted to be rotatable (figure 5).

As concerns claim 6, Lamb shows the geometric shape is rectangular (figure 5).

As concerns claim 7, Lamb shows the method for avoiding collisions between automatically controlled or remote operated objects 21 having variable positions and movements relative to each other the positions and movements being controlled by a control system, having assigning a geometric shape 13/15 to each object, the geometric shape corresponding to or exceeding the dimensions of the corresponding object, the geometric shape thus occupying a space corresponding to or exceeding the space occupied by the object, and defining a critical minimum distance (defined by Zones 1-3; figures 1, 3, 5) between the geometrical shapes 13/15 (column 4, lines 60+ & column 5, lines 1-4) where Lamb shows critical distance (defined by Zones 1-3; figures 1, 3, & 5) is dependent on the relative movement between the objects (column 4, lines 60+ & column 5, lines 1-4).

As concerns claim 8, Lamb shows the dimensions of the geometric shape corresponds to the size of the object (column 4, lines 60+ & column 5, lines 1-4).

As concerns claim 10, Lamb shows the critical distance between two geometric shapes moving toward each other corresponds to the braking distance for each

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corresponding object plus a chosen additional distance (figures 1, 3, & 5; column 4, lines 60+ & column 5, lines 1-4).

As concerns claim 11, Lamb shows the objects and corresponding geometric shapes are adapted to be rotatable (figures 1, 3, & 5).

As concerns claim 12, Lamb shows the geometric shape is rectangular (figure 5).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lamb 7,034,669 in view of Krueger 4,621,974. Lamb does not show an on offshore installations for handling pipes in drilling operations or on a drill rig, wherein the objects corresponds to means for storing, moving and/or installing equipment in the installations. However, Kreuger shows a similar offshore installations (column 2, lines 47+), especially for handling pipes in drilling operations or on a drill rig (fig 2-1), wherein the objects corresponds to means for storing, moving and/or installing equipment in the installations with means to control racking that prevent collisions (fig 1, 8, 19 & 20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Lamb, as taught by Krueger, to include the

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control system on an offshore rig for the expected result of improved accuracy and safety.

(10) Response to Argument

Appellant's arguments have been fully considered; however, the rejection is maintained since the claim language itself does not obviate the rejection above. A Finding of Fact is set forth below to clarify the issue(s) presented.

Findings of Fact:

- 1.** Lamb discloses the claimed element of a critical distance as collision Zones 1, 2 & 3, in figure 4, based on the geometric shape 13/15 of the object 21.
- 2.** Lamb shows and discloses repeated comparison of these Zones, column 5, lines 42+ & column 6, lines 1-10, to set forth a critical allowed distance disclosed as the spacing between objects 21 during normal operation in which the Zones have not been penetrated.
- 3.** Lamb shows the objects that are in motion, shown in figures 1-3 & 5 and column 2, lines 62-67.

Therefore, Lamb has disclosed the system for controlling the movement of objects including the claimed elements of a critical distance that is dependent on the relative movement between respective objects. Given Facts 1-3, Lamb shows the critical distance being dependent relative movement between objects since in order for

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the Zones of each moving object to penetrate relative to the other Zone of the other object, movement must be occurring, thus satisfying the terms “dependent on relative movement”. Therefore, the critical distance of each Zone of each object is dependent on the other’s relative movement in order for the system to calculate and initiate disabling of movement(s) of the object(s). The system Lamb compares the location of the envelopes (Zones1-3) of the moving objects to determine if these envelopes intersect. The calculation in Lamb compares envelopes relative to each other (*Fact 2*) and they are moving (*Fact 3*), the critical distance (*Fact 1*) is therefore considered dependent on relative movement since the claim language as presented does not preclude this interpretation of these terms. The Examiner has given this language the broadest interpretation In light of the specification; however, Appellant’s arguments appear to further narrow this claim language with limitations from the specification, in which these limitations appear to not be claimed.

Appellant’s arguments regarding Krueger are noted; however, are not deemed persuasive since they are founded in the argument that Lamb fails to shows the independent claims. Therefore, this rejection is also maintained.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner’s answer.

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For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Thomas A Beach

/Thomas A Beach/

Primary Examiner, Art Unit 3671

Conferees:

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